

ABSTRACT OF THE DISCLOSURE

A process for manufacturing a bipolar type semiconductor device in which at least a part of a region where an electron
5 and a hole are recombined during current flowing is formed with
a silicon carbide epitaxial layer that has been grown from the
surface of a silicon carbide substrate, is characterized by
that the surface of the silicon carbide substrate is treated
by hydrogen etching and the epitaxial layer is then formed by
10 the epitaxial growth of silicon carbide from the treated
surface. A propagation of a basal plane dislocation to the
epitaxial layer can be further reduced by treating the surface
of the silicon carbide substrate by using chemical mechanical
polishing and hydrogen etching in this order.